



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
MC 61-53
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: December 27, 2007

RE: Duke Energy Indiana, Inc - Gibson / 051-24146-00013

FROM: Matthew Stuckey, Deputy Branch Chief
Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

- (1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

- (1) the name and address of the person making the request;
- (2) the interest of the person making the request;
- (3) identification of any persons represented by the person making the request;
- (4) the reasons, with particularity, for the request;
- (5) the issues, with particularity, proposed for considerations at any hearing; and
- (6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot12/03/07



Mitchell E. Daniels, Jr.
Governor

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TITLE IV (ACID RAIN) PERMIT RENEWAL OFFICE OF AIR QUALITY

Duke Energy Indiana, Inc. – Gibson Generating Station
1097 North 950 West
Owensville, Indiana 47665

ORIS: 6113

The owners and operators (hereinafter collectively known as the Permittee) of the above source are issued this permit under the provisions of 326 Indiana Administrative Code (IAC) 21 with conditions listed on the attached pages.

Operation Permit No.: AR 051-19353-00013	
Issued by: Original signed by Paul Dubenetzky Assistant Commissioner Office of Air Quality	Issuance Date: June 28, 2006 Expiration Date: June 28, 2011

First Permit Modification No.: AR 051-24146-00013	
Issued by: Original signed by: Matthew Stuckey, Deputy Branch Chief Permits Branch Office of Air Quality	Issuance Date: December 27, 2007 Expiration Date: June 28, 2011

Title IV Operating Conditions

Title IV Source Description:

- (a) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system to control sulfur dioxide (SO₂) emissions, and exhausting to a new stack, identified as Stack 1-2. This FGD system for Boiler No. 1 is anticipated to begin operation in October 2007. Boiler No. 1 has its own continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system to control sulfur dioxide (SO₂) emissions, and exhausting to a new stack, identified as Stack 1-2. This FGD system for Boiler No. 2 is anticipated to begin operation in June 2007. Boiler No. 2 has its own continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).
- (c) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with a flue gas conditioning system and an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system to control sulfur dioxide (SO₂) emissions and exhausting to a new stack, identified as Stack 3. This FGD system for Boiler No. 3 is anticipated to begin operation in December 2006. Boiler No. 3 has its own continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).
- (d) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack D. Boiler No. 4 has continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).
- (e) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 5, installed in 1982, with a nominal heat input capacity of 5900 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack C. Boiler No. 5 has continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).

(The information contained in this box is descriptive information and does not constitute enforceable conditions.)

1. Statutory and Regulatory Authorities

In accordance with IC 13-17-3-4 and IC 13-17-3-11 as well as Titles IV and V of the Clean Air Act, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) issues this permit pursuant to 326 IAC 2 and 326 IAC 21 (incorporates by reference 40 Code of Federal Regulations (CFR) 72 through 78).

2. Standard Permit Requirements [326 IAC 21]

- (a) The designated representative has submitted a complete acid rain permit application in accordance with 40 CFR 72.30.
- (b) The Permittee shall operate Units 1, 2, 3, 4, and 5 in compliance with this permit.

3. Monitoring Requirements [326 IAC 21]

- (a) The Permittee and, to the extent applicable, the designated representative of Units 1, 2, 3, 4, and 5 shall comply with the monitoring requirements as provided in 40 CFR 75 and 76.
- (b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 76 shall be used to determine compliance by Units 1, 2, 3, 4, and 5 with the acid rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (c) The requirements of 40 CFR 75 and 76 shall not affect the responsibility of the Permittee to monitor emissions of other pollutants or other emissions characteristics at Units 1, 2, 3, 4, and 5 under other applicable requirements of the Clean Air Act and other provisions of the operating permit for the source.

4. Sulfur Dioxide Requirements [326 IAC 21]

- (a) The Permittee shall:
 - (1) Hold allowances, as of the allowance transfer deadline (as defined in 40 CFR 72.2), in the compliance subaccount of Units 1, 2, 3, 4, and 5, after deductions under 40 CFR 73.34(c), not less than the total annual emissions of sulfur dioxide for the previous calendar year from Units 1, 2, 3, 4, and 5; and,
 - (2) Comply with the applicable acid rain emissions limitations for sulfur dioxide.
- (b) Each ton of sulfur dioxide emitted in excess of the acid rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Clean Air Act.
- (c) Units 1, 2, 3, 4, and 5 shall be subject to the requirements under paragraph 4(a) of the sulfur dioxide requirements as follows:
 - (1) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or,
 - (2) Starting on the latter of January 1, 2000, or the deadline for monitor certification under 40 CFR 75, an affected unit under 40 CFR 72.6(a)(3).
- (d) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program
- (e) An allowance shall not be deducted in order to comply with the requirements under paragraph 4(a) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (f) An allowance allocated by the U.S. EPA under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the acid rain permit application, the acid rain permit, the acid rain portion of an operating permit, or the written exemption under 40 CFR 72.7 and 72.8 and 326 IAC 21, and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (g) An allowance allocated by U.S. EPA under the Acid Rain Program does not constitute a property right.

- (h) No permit revision may be required for increases in emissions that are authorized by allowances acquired pursuant to the Acid Rain Program, provided that the increases do not require a permit revision under any other applicable requirement. [326 IAC 2-7-5(4)(A)]
- (i) No limit shall be placed on the number of allowances held by the Permittee. The Permittee may not, however, use allowances as a defense to noncompliance with any applicable requirement other than the requirements of the Acid Rain Program. [326 IAC 2-7-5(4)(B)]
- (j) Sulfur dioxide allowances shall be allocated to each unit at the source as follows:

SO ₂ Annual Allowance Allocations (tons) *					
	2005	2006	2007	2008	2009
Unit 1	17,415	17,415	17,415	17,415	17,415
Unit 2	17,678	17,678	17,678	17,678	17,678
Unit 3	17,709	17,709	17,709	17,709	17,709
Unit 4	17,384	17,384	17,384	17,384	17,384
Unit 5	18,180	18,180	18,180	18,180	18,180

* The number of allowances allocated to Phase II affected units by U.S. EPA may change in a revision to 40 CFR 73 Tables 2, 3, and 4 and 326 IAC 21. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U.S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO₂ allowance allocations identified in this permit. (See 40 CFR 72.84)

5. Nitrogen Oxides Requirements [326 IAC 21]

- (a) The Permittee shall comply with the applicable acid rain emissions limitation for nitrogen oxides (NO_x) for Units 1, 2, 3, 4, and 5.
- (b) NO_x Emission Averaging Plan for Unit 1:
 - (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NO_x emission averaging plan for Unit 1, effective from calendar year 2007 through 2011. Under the plan the NO_x emissions from Unit 1 shall not exceed the alternative contemporaneous annual emission limitation (ACEL) of 0.29 lb/MMBtu. In addition, Unit 1 shall not have an annual heat input less than 40,679,344 MMBtu.
 - (2) Under the plan, the actual Btu-weighted annual average NO_x emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NO_x emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 1 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.

(c) NOx Emission Averaging Plan for Unit 2:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 2, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 2 shall not exceed the ACEL of 0.29 lb/MMBtu. In addition, Unit 2 shall not have an annual heat input less than 35,784,543 MMBtu.
- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 2 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.

(d) NOx Emission Averaging Plan for Unit 3:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 3, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 3 shall not exceed the ACEL of 0.30 lb/MMBtu. In addition, Unit 3 shall not have an annual heat input less than 45,485,728 MMBtu.
- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 3 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.

(e) NOx Emission Averaging Plan for Unit 4:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 4, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 4 shall not exceed the ACEL of 0.29 lb/MMBtu. In addition, Unit 4 shall not have an annual heat input less than 53,603,321 MMBtu.
- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 4 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.

- (f) NOx Emission Averaging Plan for Unit 5:
- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 5, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 5 shall not exceed the ACEL of 0.29 lb/MMBtu. In addition, Unit 5 shall not have an annual heat input less than 47,798,920 MMBtu.
 - (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 5 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.
- (g) In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the Kentucky Department of Environmental Protection, Division of Air Quality; North Carolina Department of Environmental and Natural Resources, Division of Air Quality; and South Carolina Department of Health and Environmental Control, Bureau of Air Quality have also approved this averaging plan.
- (h) In addition to the described NOx compliance plan, the units shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NOx compliance plan and requirements covering excess emissions.

6. Excess Emissions Requirements [40 CFR 77] [326 IAC 21]

- (a) If Unit 1, 2, 3, 4, or 5 has excess emissions of sulfur dioxide in any calendar year, the designated representative shall submit a proposed offset plan to U.S. EPA and IDEM, OAQ as required under 40 CFR 77 and 326 IAC 21.

- (b) The designated representative shall submit required information to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

and

Ms. Cecilia Mijares
Air and Radiation Division
U.S. Environmental Protection Agency, Region V
77 West Jackson Boulevard
Chicago, IL 60604-3590

and

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code (6204N)
Washington, DC 20460

- (c) If Unit 1, 2, 3, 4, or 5 has excess emissions, as defined in 40 CFR 72.2, in any calendar year the Permittee shall:

- (1) Pay to U.S. EPA without demand the penalty required, and pay to U.S. EPA upon demand the interest on that penalty, as required by 40 CFR 77 and 326 IAC 21; and,
- (2) Comply with the terms of an approved sulfur dioxide offset plan, as required by 40 CFR 77 and 326 IAC 21.

7. Record Keeping and Reporting Requirements [326 IAC 21]

- (a) Unless otherwise provided, the Permittee shall keep on site each of the following documents for a period of 5 years, as required by 40 CFR 72.9(f), from the date the document is created. This period may be extended for cause, at any time prior to the end of the 5 years, in writing by U.S. EPA or IDEM, OAQ:
 - (1) The certificate of representation for the designated representative of Units 1, 2, 3, 4, and 5 and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5 year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
 - (2) All emissions monitoring information collected in accordance with 40 CFR 75 shall be retained on site for 3 years;
 - (3) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (4) Copies of all documents used to complete an acid rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (b) The designated representative of Units 1, 2, 3, 4, and 5 shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR 72.90, Subpart I, 40 CFR 75, and 326 IAC 21. The required information is to be submitted to the appropriate authority(ies) as specified in 40 CFR 72.90, Subpart I, and 40 CFR 75.

8. Submissions [326 IAC 21]

- (a) The designated representative of Units 1, 2, 3, 4, and 5 shall submit a certificate of representation, and any superseding certificate of representation, to U.S. EPA and IDEM, OAQ in accordance with 40 CFR 72 and 326 IAC 21.

- (b) The designated representative shall submit required information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, IN 46204-2251

and

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code (6204N)
Washington, DC 20460

- (c) Each such submission under the Acid Rain Program shall be submitted, signed and certified by the designated representative for all sources on behalf of which the submission is made.

- (d) In each submission under the Acid Rain Program, the designated representative shall certify, by his or her signature, the following statements which shall be included verbatim in the submission:
- (1) "I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made."; and
 - (2) "I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."
- (e) The designated representative of Units 1, 2, 3, 4, and 5 shall notify the Permittee:
- (1) By the date of submission, of any Acid Rain Program submissions by the designated representative;
 - (2) Within 10 business days of receipt of any written determination by U.S. EPA or IDEM, OAQ; and,
 - (3) Provided that the submission or determination covers Unit 1, 2, 3, 4, or 5.
- (f) The designated representative of Units 1, 2, 3, 4, and 5 shall provide the Permittee a copy of any submission or determination under paragraph 8(e), unless the Permittee expressly waives the right to receive a copy.

9. Severability [326 IAC 21]

Invalidation of the acid rain portion of an operating permit does not affect the continuing validity of the rest of the operating permit, nor shall invalidation of any other portion of the operating permit affect the continuing validity of the acid rain portion of the permit. [40 CFR 72.72(b), 326 IAC 21, and 326 IAC 2-7-5(5)]

10. Liability [326 IAC 21]

- (a) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement by U.S. EPA pursuant to Section 113(c) of the Clean Air Act and shall be subject to enforcement by IDEM pursuant to 326 IAC 21 and IC 13-30-3.
- (b) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to Section 113(c) of the Clean Air Act, 18 U.S.C. 1001 and IDEM pursuant to 326 IAC 21 and IC 13-30-6-2.

- (c) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (d) Units 1, 2, 3, 4, and 5 shall meet the requirements of the Acid Rain Program.
- (e) Any provision of the Acid Rain Program that applies to Unit 1, 2, 3, 4, or 5, including a provision applicable to the designated representative of Unit 1, 2, 3, 4, or 5 shall also apply to the Permittee.
- (f) Any provision of the Acid Rain Program that applies to Unit 1, 2, 3, 4, or 5, including a provision applicable to the designated representative, shall also apply to the Permittee. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NOx averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR 75, including 40 CFR 75.16, 75.17, and 75.18, the Permittee and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (g) Each violation of a provision of 40 CFR 72, 73, 75, 76, 77, and 78 by Unit 1, 2, 3, 4, or 5, or by the Permittee or designated representative shall be a separate violation of the Clean Air Act.

11. Effect on Other Authorities [326 IAC 21]

No provision of the Acid Rain Program, an acid rain permit application, an acid rain permit, an acid rain portion of an operation permit, or a written exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (a) Except as expressly provided in Title IV of the Clean Air Act (42 USC 7651 to 7651(o)), exempting or excluding the Permittee and, to the extent applicable, the designated representative of Unit 1, 2, 3, 4, or 5 from compliance with any other provision of the Clean Air Act, including the provisions of Title I of the Clean Air Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (b) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Clean Air Act;
- (c) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
- (d) Modifying the Federal Power Act (16 USC 791(a) et seq.) or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; and
- (e) Interfering with or impairing any program for competitive bidding for power supply in a state in which such a program is established.

Indiana Department of Environmental Management Office of Air Quality

Addendum to the Technical Support Document (TSD) for a Phase II Acid Rain NO_x Averaging Plan Permit Modification

Source Description and Location

Source Name:	Duke Energy Indiana, Inc. – Gibson Generating Station
Source Location:	1097 North 950 West, Owensville, Indiana, 47665
Mailing Address:	1000 East Main Street, Plainfield, Indiana, 46168
County:	Gibson
Operated By:	Duke Energy Indiana, Inc.
ORIS Code:	6113
Previous Phase II Permit No.:	051-5208-00013, issued on December 31, 1997
Phase II Renewal Permit No.:	051-19353-00013, issued on June 28, 2006
Phase II Permit Modification No.:	051-24146-00013
Permit Reviewer:	Gary Freeman, (317) 233-5334

Public Notice Information

On November 6, 2007, the Office of Air Quality (OAQ) had a notice published in the Princeton Daily Clarion in Princeton, Indiana, stating that Duke Energy Indiana, Inc. – Gibson Generating Station had applied for a permit modification to their Phase II Acid Rain Renewal Permit issued on June 28, 2006 to revise the NO_x Averaging Plan for (5) five dry bottom, pulverized coal-fired boilers, identified as Units 1, 2, 3, 4 and 5 for calendar years 2007 to 2011. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments Received

On October 30, 2007, OAQ received comments from Patrick Coughlin of Duke Energy Indiana, Inc. On November 5, 2007 received comments from EPA clarifying the common stack requirements. The comments are summarized in the subsequent pages, with IDEM's corresponding responses.

The summary of the comments and IDEM, OAQ responses, including changes to the permit (language deleted is shown in ~~strikeout~~ and language added is shown in **bold**) are as follows:

The OAQ prefers that the Technical Support Document reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision. The Description of the Proposed Modification section of the TSD is revised in this addendum as follows:

EPA Comment:

The last sentence in paragraphs 5(b)(1) through 5(f)(1) implies that if a unit does not meet its averaging plan limit, it would be subject to the standard limits and this is incorrect. If the group is not met in an averaging plan for a given compliance year, the ACEL and heat input limits in the averaging plan become enforceable limits, not the standard limit.

IDEM Response:

IDEM agrees with the EPA comment. For common stack units (1-5) paragraphs, 5.(b)(1), 5.(c)(1), 5.(d)(1), 5.(e)(1) and 5(f)(1) the last sentence is no longer necessary since the requirements are already identified in paragraphs 1 and 2. The last sentences in the units listed in paragraph 5(b)(1), 5.(c)(1), 5.(d)(1), 5.(e)(1) and 5(f)(1) were removed.

5. Nitrogen Oxides Requirements [326 IAC 21]

(b) NOx Emission Averaging Plan for Unit 2:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 1, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 1 shall not exceed the ACEL of 0.29 lb/MMBtu. In addition, this unit shall not have an annual heat input greater than 40,679,344 MMBtu. ~~If Unit 1 is in compliance with its applicable emission limitation for each year of the plan, then Unit 1 shall not be subject to the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu until January 1, 2011.~~

(c) NOx Emission Averaging Plan for Unit 3:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 2, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 2 shall not exceed the ACEL of 0.29 lb/MMBtu. In addition, Unit 2 shall not have an annual heat input greater than 35,784-543 MMBtu. ~~If Unit 2 is in compliance with its applicable emission limitation for each year of the plan, then Unit 2 shall not be subject to the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2011.~~

(d) NOx Emission Averaging Plan for Unit 4:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 3, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 3 shall not exceed the ACEL of 0.30 lb/MMBtu. In addition, Unit 3 shall not have an annual heat input greater than 45,485,728 MMBtu. ~~If Unit 3 is in compliance with its applicable emission limitation for each year of the plan, then Unit 3 shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2), of 0.50 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2011.~~

(e) NOx Emission Averaging Plan for Unit 4:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 4, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 4 shall not exceed the ACEL of 0.29lb/MMBtu. In addition, Unit 4 shall not have an annual heat input greater than 53,603,321 MMBtu. ~~If Unit 4 is in compliance with its applicable emission limitation for each year of the plan, then Unit 4 shall not be subject to the applicable emission limitation, under 40 CFR 76.5(a)(2), of 0.50 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2011.~~

(f) NOx Emission Averaging Plan for Unit 5:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 5, effective from calendar year 2007 through 2011. Under the plan the NOx emissions from Unit 5 shall not exceed the ACEL of 0.29 lb/MMBtu. In addition, Unit 5 shall not have an annual heat input less than 47,798,920 MMBtu. ~~If Unit 5 is in compliance with its applicable emission limitation for each year of the plan, then Unit 5 shall not be subject to the applicable emission limitation, under 40 CFR 76.5(a)(1), of 0.46 lb/MMBtu for dry bottom wall-fired boilers until January 1, 2011.~~

Duke Energy Comment:

Table 2 in the Technical Support Document reflects the Calendar Years date as 2006 to 2009.

IDEM Comment:

While the Technical Support Document is not changed after public notice this Technical Support Document has been updated to 2007 to 2011 which are the Calendar Years of the NOx Averaging Plan.

Table 2			
List of Sources Participating in the NO _x Averaging Plan as submitted on January 11, 2007			
Calendar Years 2006 to 2009 2007 to 2011			
Source Names	No. of Units	Source Names	No. of Units
Belews Creek, NC	2	Gallagher, IN	4
Buck, NC	5	Gibson, IN	5
Cayuga, IN	2	Marshall, NC	4
Cliffside, NC	5	Riverbend, NC	4
Dan River, NC	3	W. S. Lee, SC	3
East Bend, KY	1	Wabash River	6
Edwardsport, IN	3	Total No. of Units	52
G. G. Allen, NC	5	Total No. of Sources	14

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document
For a Phase II Acid Rain NO_x Averaging Plan
Permit Modification

Source Background and Description

Source Name:	Duke Energy Indiana, Inc. – Gibson Generating Station
Source Location:	1097 North 950 West, Owensville, Indiana 47665
Mailing Address:	1000 East Main Street, Plainfield, Indiana, 46168
County:	Gibson
Operated By:	Duke Energy Indiana, Inc.
ORIS Code:	6113
Previous Phase II Permit No.:	051-5208-00013, issued on December 31, 1997
Phase II Renewal Permit No.:	051-19353-00013, issued on June 28, 2006
Phase II Permit Modification No.:	051-24146-00013
Permit Reviewer:	Gary Freeman, (317) 233-5334

Phase II Permit Modification

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has reviewed a Phase II Acid Rain permit modification application submitted by Duke Energy Indiana, Inc. on January 3, 2007. The application is to revise the NO_x Averaging Plan for the following affected units at the station located at 1097 North 950 West, Owensville, Indiana 47665.

- (a) One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 1
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 2
- (c) One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 3
- (d) One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 4
- (e) One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 5

This permit modification AR 051-24146-00013 covers calendar years 2007 to 2011.

Existing Approvals

The source has been operating under the following previous Phase II approval:

- (a) AR 051-19353-00013, issued on June 28, 2006

PSI Energy, Inc. was issued a Title IV permit for the Gibson Generating Station, effective from January 1, 2000 to December 31, 2004. On November 6, 1998, PSI Energy, Inc. submitted a Phase II NO_x Compliance Plan and incorporated a new Phase II NO_x Averaging Plan for the Gibson Generating Station. PSI Energy, Inc. Gibson Generating Station revised the Title IV Emissions Averaging Plan on November 23, 1999. PSI Energy, Inc. Gibson Generating Station submitted a Phase II Acid Rain renewal application on July 1, 2004. An application was received December 12, 2006 stating effective October 1, 2006 PSI Energy, Inc. - Gibson River Generating Station name was changed to Duke Energy Indiana, Inc. – Gibson Generating Station.

Proposed Changes

The source descriptions were updated for Boilers No. 1, 2, 3, 4 and 5 to make them consistent with the source descriptions in Part 70 Operating Significant Permit Modification No. 051-23526-00013, issued May 24, 2007. The **bold faced language** is new language that has been added and the ~~strikeout~~ is language that has been removed.

Title IV Operating Conditions

Title IV Source Description:

- ~~(a) One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 1 (Boiler No. 1 in the Title V permit), construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5,875 million Btu per hour (MMBtu/hr), equipped with an electrostatic precipitator (ESP) for particulate matter (PM) control, a Selective Catalytic Reduction (SCR) for nitrogen oxide (NO_x) control during the ozone season, a flue gas desulfurization (FGD) system for sulfur dioxide (SO₂) control, and exhausting to Stack 1-2. This FGD system for Unit 1 is anticipated to begin operation in October 2007. Unit 1 has its own continuous emissions monitors (CEMs) for NO_x and SO₂, and a continuous opacity monitor (COM).~~
- (a) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 1, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system to control sulfur dioxide (SO₂) emissions, and exhausting to a new stack, identified as Stack 1-2. This FGD system for Boiler No. 1 is anticipated to begin operation in October 2007. Boiler No. 1 has its own continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).
- ~~(b) One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 2 (Boiler No. 2 in the Title V permit), construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5,875 million Btu per hour (MMBtu/hr), equipped with an electrostatic precipitator (ESP) for particulate matter (PM) control, a Selective Catalytic Reduction (SCR) system for nitrogen oxide (NO_x) control during the ozone season, a flue gas desulfurization (FGD) system for sulfur dioxide (SO₂) emissions control, and exhausting to Stack 1-2. This FGD system for Unit 2 is anticipated to begin operation in June 2007. Unit 2 has its own continuous emissions monitors (CEMs) for NO_x and SO₂, and a continuous opacity monitor (COM).~~
- (b) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 2, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5875 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system to control sulfur dioxide (SO₂) emissions, and exhausting to a new stack, identified as Stack 1-2. This FGD system for Boiler No. 2 is anticipated to begin operation in June 2007. Boiler No. 2 has its own continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).
- ~~(c) One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 3 (Boiler No. 3 in the Title V permit), construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5,897 million Btu per hour (MMBtu/hr), equipped with a flue gas conditioning system and an electrostatic precipitator (ESP) for particulate matter (PM) control, a Selective Catalytic Reduction (SCR) system for nitrogen oxide (NO_x) control during the ozone season, a flue gas desulfurization (FGD) system for sulfur dioxide (SO₂) emissions control, and exhausting to Stack 3. This FGD system for Unit 3 is anticipated to begin operation in December 2006. Unit 3 has its own continuous emissions monitors (CEMs) for NO_x and SO₂, and a continuous opacity monitor (COM).~~
- (c) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 3, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with a flue gas conditioning system and an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system to control sulfur dioxide (SO₂) emissions and exhausting to a new stack, identified as Stack 3. This FGD system for Boiler No. 3 is anticipated to begin operation in December 2006. Boiler No. 3 has its own continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous

opacity monitor (COM).

- (d) ~~One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 4 (Boiler No. 4 in the Title V permit), construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5,897 million Btu per hour (MMBtu/hr), equipped with an electrostatic precipitator (ESP) for particulate matter (PM) control, a Selective Catalytic Reduction (SCR) system for nitrogen oxide (NO_x) control during the ozone season, a flue gas desulfurization (FGD) system for sulfur dioxide (SO₂) control. Unit 4 exhausts to Stack D during normal operations and exhausts to Stack B during startup, shutdown, or other periods when the FGD is not in operation. Unit 4 has continuous emissions monitors (CEMs) for NO_x and SO₂, and a continuous opacity monitor (COM).~~
- (d) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 4, construction commenced prior to August 17, 1971, with a nominal heat input capacity of 5897 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack D. Boiler No. 4 has continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).
- (e) ~~One (1) dry bottom, pulverized coal-fired boiler, identified as Unit 5 (Boiler No. 5 in the Title V permit), installed in 1982, with a nominal heat input capacity of 5,900 million Btu per hour (MMBtu/hr), equipped with an electrostatic precipitator (ESP) for particulate matter (PM) control, a Selective Catalytic Reduction (SCR) system for nitrogen oxide (NO_x) control during the ozone season, a flue gas desulfurization (FGD) system for sulfur dioxide (SO₂) control, and exhausting to stack C. Boiler No. 5 has continuous emissions monitors (CEMs) for NO_x and SO₂, and a continuous opacity monitor (COM).~~
- (e) One (1) dry bottom, pulverized coal-fired boiler, identified as Boiler No. 5, installed in 1982, with a nominal heat input capacity of 5900 million Btu per hour (MMBtu/hr), with an electrostatic precipitator (ESP) for control of particulate matter, equipped with Selective Catalytic Reduction (SCR) for control of NO_x during the ozone season, with a flue gas desulfurization (FGD) system for control of sulfur dioxide, and exhausting to stack C. Boiler No. 5 has continuous emissions monitors (CEMs) for nitrogen oxides (NO_x) and sulfur dioxide (SO₂) and a continuous opacity monitor (COM).

(The information contained in this box is descriptive information and does not constitute enforceable conditions.)

This permit modification AR 051-24146-00013 covers calendar years 2007 to 2011 involving the same affected units as indicated in the Phase II permit renewal AR 051-19353-00013, issued on June 28, 2006. In accordance with 40 CFR 75.17(a)(1), conditions 5.b(3), 5(c)(3), 5(d)(3) and 5(e)(3) were removed from the permit since each boiler is equipped with its own NO_x and SO₂ monitoring systems. The Phase II renewal is revised as follows.

5. Nitrogen Oxides Requirements [326 IAC 21]

- (a) The Permittee shall comply with the applicable acid rain emissions limitation for nitrogen oxides (NO_x) for Units 1, 2, 3, 4, and 5.
- (b) NO_x Emission Averaging Plan for Unit 1:
- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NO_x emission averaging plan for Unit 1, effective from calendar year ~~2005~~ **2007** through ~~2007~~ **2011**. Under the plan the NO_x emissions from Unit 1 shall not exceed the alternative contemporaneous annual emission limitation (ACEL) of ~~0.46~~ **0.29** lb/MMBtu. In addition, Unit 1 shall not have an annual heat input less than ~~43,700,000~~ **40,679,344** MMBtu. If Unit 1 is in compliance with its applicable emission limitation for each year of the plan, then Unit 1 shall not be subject to the

applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers until January 1, ~~2008~~ **2011**.

- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 1 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.

- ~~(3) Permittee must annually demonstrate that Unit 1 meets the NOx emission limit of 0.45 lb ~~0.50 lb~~/MMBtu by showing that emissions at the common stack (through which emissions from Units 1 and 2 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack A. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.17.~~

(c) NOx Emission Averaging Plan for Unit 2:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 2, effective from calendar year ~~2005~~ **2007** through ~~2007~~ **2011**. Under the plan the NOx emissions from Unit 2 shall not exceed the ACEL of ~~0.45~~ **0.29** lb/MMBtu. In addition, Unit 2 shall not have an annual heat input less than ~~44,900,000~~ **35,784,543** MMBtu. If Unit 2 is in compliance with its applicable emission limitation for each year of the plan, then Unit 2 shall not be subject to the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers until January 1, ~~2008~~ **2011**.

- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 2 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.

- ~~(3) Permittee must annually demonstrate that Unit 2 meets the NOx emission limit of 0.45 ~~0.50~~ lb/MMBtu by showing that emissions at the common stack (through which emissions from Units 1 and 2 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack A. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.17.~~

(d) NOx Emission Averaging Plan for Unit 3:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 3, effective from calendar year ~~2005~~ **2007** through ~~2007~~ **2011**. Under the plan the NOx emissions from Unit 3 shall not exceed the ACEL of ~~0.49~~ **0.30** lb/MMBtu. In addition, Unit 3 shall not have an annual heat input less than ~~45,300,000~~ **45,485,728** MMBtu. If Unit 3 is in compliance with its applicable emission limitation for each year of the plan, then Unit 3 shall not be subject to the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers until January 1, ~~2008~~ **2011**.
- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 3 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.
- ~~(3) Permittee must annually demonstrate that Unit 3 meets the NOx emission limit of 0.45~~ ~~**0.50**~~ ~~lb/MMBtu by showing that emissions at the common stack (through which emissions from Units 3 and 4 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack B. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.17.~~

(e) NOx Emission Averaging Plan for Unit 4:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 4, effective from calendar year ~~2005~~ **2007** through ~~2007~~ **2011**. Under the plan the NOx emissions from Unit 4 shall not exceed the ACEL of ~~0.45~~ **0.29** lb/MMBtu. In addition, Unit 4 shall not have an annual heat input less than ~~47,100,000~~ **53,603,321** MMBtu. If Unit 4 is in compliance with its applicable emission limitation for each year of the plan, then Unit 4 shall not be subject to the applicable emission limitation, under 40 CFR 76.5(a)(2) of 0.50 lb/MMBtu for dry bottom wall-fired boilers until January 1, ~~2008~~ **2011**.
- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 4 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.
- ~~(3) Permittee must annually demonstrate that Unit 4 meets the NOx emission limit of 0.45~~ ~~**0.50**~~ ~~lb/MMBtu by showing that emissions at the common stack (through which emissions from Units 3 and 4 are vented) meet such limit, based upon the data from certified continuous emission monitoring systems (CEMS) at common stack B. CEMS certification must be performed in accordance with the requirements and specifications delineated at 40 CFR 75.17.~~

(f) NOx Emission Averaging Plan for Unit 5:

- (1) Pursuant to 40 CFR 76.11, IDEM, OAQ approves a NOx emission averaging plan for Unit 5, effective from calendar year ~~2005~~ **2007** through ~~2007~~ **2011**. Under the plan the NOx emissions from Unit 5 shall not exceed the ACEL of ~~0.45~~ **0.29** lb/MMBtu. In addition, Unit 5 shall not have an annual heat input less than ~~48,900,000~~ **47,798,920** MMBtu. If Unit 5 is in compliance with its applicable emission limitation for each year of the plan, then Unit 5 shall not be subject to the applicable emission limitation, under 40 CFR 76.7(a)(2) of 0.46 lb/MMBtu for dry bottom wall-fired boilers until January 1, ~~2008~~ **2011**.
- (2) Under the plan, the actual Btu-weighted annual average NOx emission rate for all the units in the plan shall be less than or equal to the Btu-weighted annual average NOx emission rate for the same units had they each been operated, during the same period of time, in compliance with the applicable emission limitations under 40 CFR 76.5, 76.6, or 76.7, except that for any early election units, the applicable emission limitations shall be under 40 CFR 76.7. If the designated representative demonstrates that the requirement of the prior sentence (as set forth in 40 CFR 76.11(d)(1)(ii)(A)) is met for a year under the plan, then Unit 5 shall be deemed to be in compliance for that year with its annual ACEL and annual heat input limit.

- (g) In accordance with 40 CFR 72.40(b)(2), approval of the averaging plan shall be final only when the ~~Ohio Environmental Protection Agency, Division of Air Pollution Control~~ Kentucky Department of Environmental Protection, Division of Air Quality; **North Carolina Department of Environmental and Natural Resources, Division of Air Quality; and South Carolina Department of Health and Environmental Control, Bureau of Air Quality** have also approved this averaging plan.

Specific NO_x Compliance and Averaging Plan

There are five (5) affected units, identified as Units 1, 2, 3, 4 and 5, in this generating station. Table 1 and 2 below summarize the NOx compliance and averaging plan for these units.

Table 1			
Calendar Years 2005 to 2007	Emission Limitation per 40 CFR 76.5, 76.6 or 76.7 (lb/MMBTU)	Alternative Limit (lb/MMBTU)	Heat Input Limit (MMBTU)
Unit 1	0.50	0.46	43,700,000
Unit 2	0.50	0.45	44,900,000
Unit 3	0.50	0.49	45,300,000
Unit 4	0.50	0.45	47,100,000
Unit 5	0.46	0.45	48,900,000

Calendar Years 2007 thru 2011	Emission Limitation per 40 CFR 76.5, 76.6 or 76.7 (lb/MMBTU)	Alternative Limit (lb/MMBTU)	Heat Input Limit (MMBTU)
Unit 1	0.50	0.29	40,679,344
Unit-2	0.50	0.29	35,784,543
Unit 3	0.50	0.30	45,485,728
Unit 4	0.50	0.29	53,603,321
Unit 5	0.46	0.29	47,798,920
The BTU weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan = BTU weighted annual average emission rate for the same units operated in compliance with 40 CFR 76 = 0.48			

Table 2			
List of Sources Participating in the NO _x Averaging Plan as submitted on January 11, 2007 Calendar Years 2006 to 2009			
Source Names	No. of Units	Source Names	No. of Units
Belews Creek, NC	2	Gallagher, IN	4
Buck, NC	5	Gibson, IN	5
Cayuga, IN	2	Marshall, NC	4
Cliffside, NC	5	Riverbend, NC	4
Dan River, NC	3	W. S. Lee, SC	3
East Bend, KY	1	Wabash River	6
Edwardsport, IN	3	Total No. of Units	52
G. G. Allen, NC	5	Total No. of Sources	14

Recommendation

The staff recommends to the IDEM's Commissioner that the Title IV Acid Rain NO_x Averaging Plan permit modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

A Phase II Acid Rain permit modification application and additional information for the purposes of this review were received on December 27, 2006, January 3, 2007 and January 11, 2007.

IDEM Contact

- (a) Permit
Questions regarding the proposed Phase II permit modification can be directed to Gary Freeman at the Indiana Department Environmental Management (IDEM), Office of Air Quality (OAQ), 100 North Senate Avenue, **MC 61-65 IGCN 1003**, Indianapolis, Indiana 46204-2251 or by telephone at (317) 233-5334 or toll free at 1-800-451-6027 extension 3-5334.

- (b) **Compliance Inspection**
The source will be inspected by IDEM's compliance inspection staff. Persons seeking to obtain information regarding the source's compliance status or to report any potential violation of any permit condition should contact Dan Hancock at the Office of Air Quality (OAQ) address or by telephone at (317) 232-8429 or toll free at 1-800-451-6027 extension 232-8429.
- (c) **Copies**
Copies of the Code of Federal Regulations (CFR) referenced in the permit may be obtained from:

Indiana Department of Environmental Management
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

or

The Government Printing Office
Washington, D.C. 20402

or

on the Government Printing Office website at
<http://www.access.gpo.gov/nara/cfr/index.html>